

Date: Friday, 11/17/2006 10:06:04 AM  
 User: Kim Johnston

## Process Sheet

<b>Customer</b> :	CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> :	HANDLE WELDMENT
<b>Job Number</b> :	29525		
<b>Estimate Number</b> :	12035		
<b>P.O. Number</b> :	N/A	<b>Part Number</b> :	D33551
<b>This Issue</b> :	11/17/2006	<b>S.O. No.</b> :	N/A
<b>Prsht Rev.</b> :	NC	<b>Drawing Number</b> :	D3355 REV. B
<b>First Issue</b> :	N/A	<b>Project Number</b> :	N/A
<b>Previous Run</b> :	26926	<b>Drawing Revision</b> :	B
		<b>Material</b> :	N/A
<b>Written By</b> :		<b>Due Date</b> :	12/5/2006
<b>Checked &amp; Approved By</b> :	Qty: 4 Um: Each		
<b>Comment</b> :	est rev 06.01.19 new issue EC		

## Additional Product

Job Number:



<b>Seq. #:</b>	<b>Machine Or Operation:</b>	<b>Description :</b>
----------------	------------------------------	----------------------

1.0	M4130NR1250	4130N ROUND BAR
-----	-------------	-----------------



**Comment:** Qty.: 0.5250 f(s)/Unit Total: 2.1000 f(s)  
 AISI 4130N ROUND BAR 1.250"dia. batch: 1718490

2.0	BAND SAW	BAND SAW
-----	----------	----------



**Comment:** BAND SAW  
 Cut blank 6.10" long  
 DIP/MS 06/12/9 4

3.0	LATHE CONV.	CONVENTIONAL LATHE
-----	-------------	--------------------



**Comment:** CONVENTIONAL LATHE  
 1-Turn as per Dwg D3355  
 DIP/MS 06/12/9 4

4.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
-----	---------------	------------------------------



**Comment:** CONVENTIONAL MILLING MACHINE  
 1- Mill as per dwg D3355  
 2-Deburr as per dwg D3355  
 DIP/MS 06/12/9 4

5.0	QC5	INSPECT WORK TO CURRENT STEP
-----	-----	------------------------------



**Comment:** INSPECT WORK TO CURRENT STEP  
 EC 06/12/10

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: ☒ Date: 02/12/12  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Friday, 11/17/2006 10:06:05 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HANDLE WELDMENT

Job Number: 29525

Part Number: D33551

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 5726

*PV* *6/12/11* *(4)*

7.0

QC21

FINAL INSPECTION/W/O RELEASE



*(4)*

Comment: FINAL INSPECTION/W/O RELEASE

*IS* *06/12/12*

Job Completion



*u* *06.12.12*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



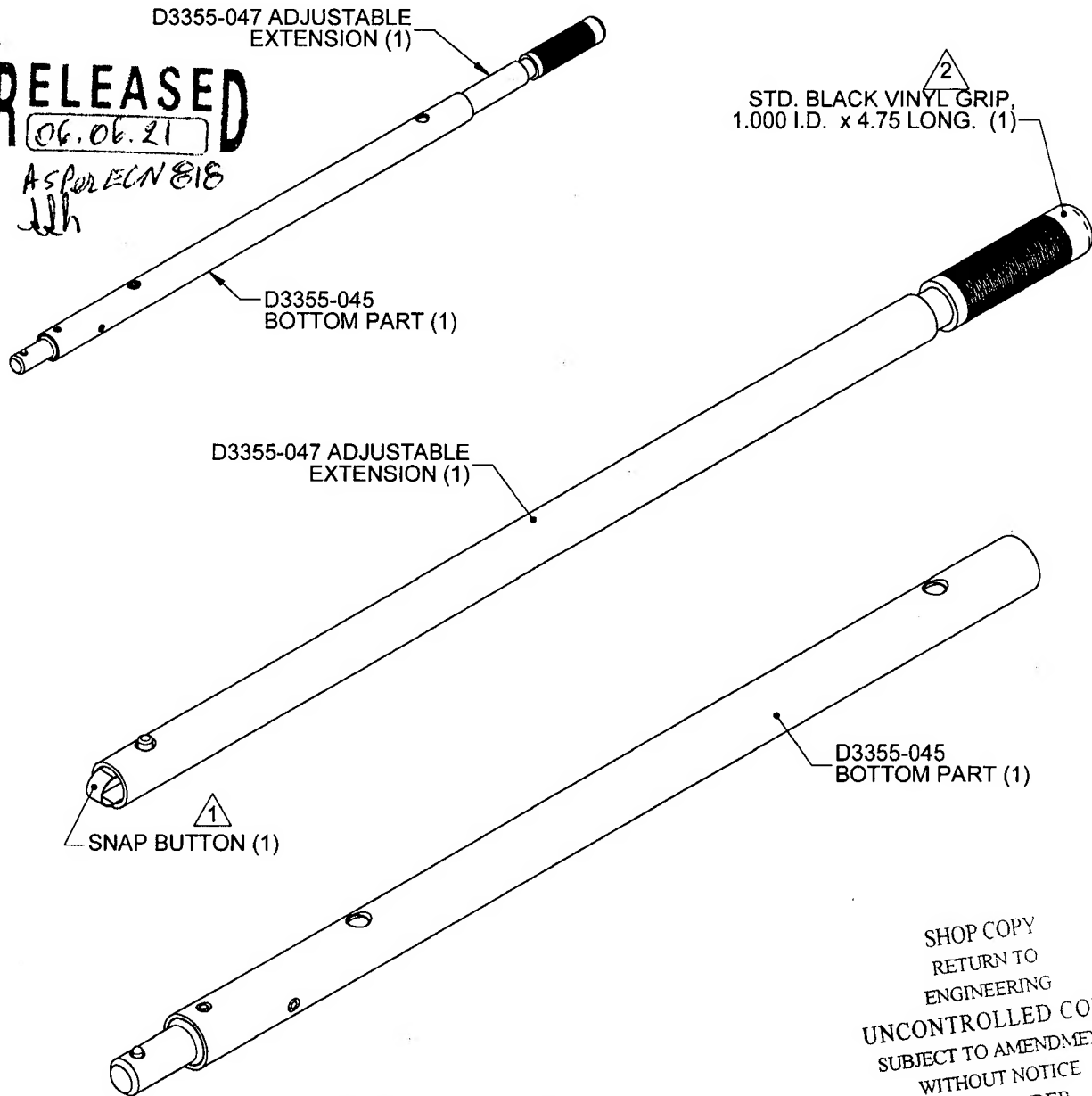


**DART**

DESIGN RF	DRAWN BY CB	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3355</b>	REV. B SHEET 1 OF 6
DATE <b>06.05.31</b>		TITLE <b>HANDLE WELDMENT</b>	SCALE 1:8
A	05.02.07	NEW ISSUE	
B	06.05.31	EDITED NOTE 1 (SHEET 2), UPDATE DETAIL B	

**RELEASED**  
**06.06.21**

*AS FOR ECN 818*  
*[Signature]*



**D3355-041 HANDLE ASSEMBLY**

**NOTES:**

- 1) POSSIBLE SUPPLIER: REID TOOLS SUPPLY CO. P/N VA-2160
- 2) POSSIBLE SUPPLIER: REID TOOLS SUPPLY CO. P/N GP-1R

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. **29525**

**COPYRIGHT © 2005 BY DART AEROSPACE LTD.**

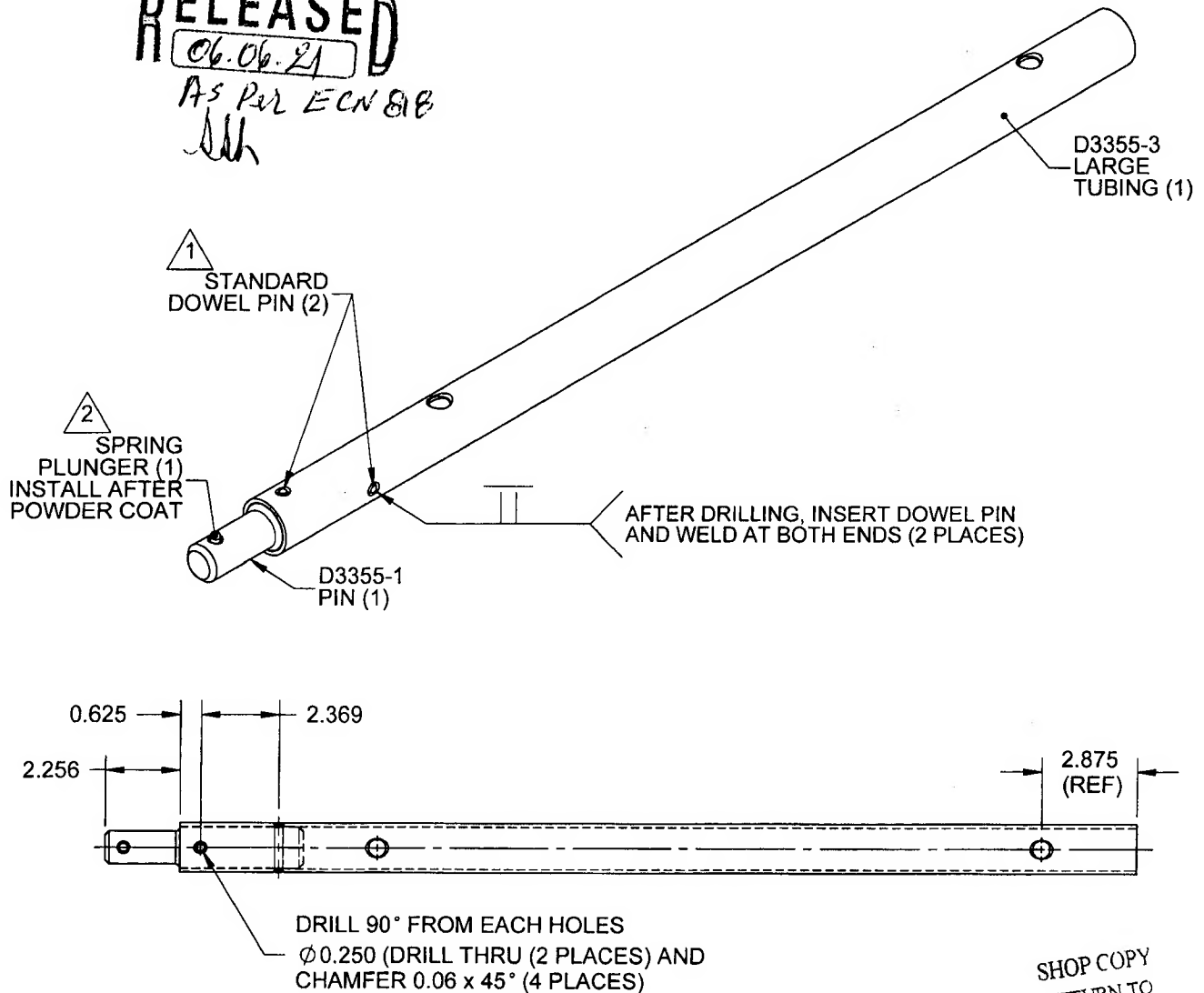
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN RF	DRAWN BY CB	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3355</b>	REV. B SHEET 2 OF 6
DATE <b>06.05.31</b>	TITLE <b>HANDLE WELDMENT</b>		SCALE 1:5

**RELEASED**  
**06.06.21**

*AS PER ECN 818*  
*[Signature]*



### **D3355-045 BOTTOM PART**

#### **NOTES:**

- 1) STEEL STANDARD GROUND DOWEL PIN,  $\phi 0.250 \times 1.50$  LONG  
POSSIBLE SUPPLIER: SPAENAU, P/N 238-043
- 2) SPRING PLUNGER, POSSIBLE SUPPLIER: REID TOOLS SUPPLY CO. P/N VA-7130
- 3) WELD PER DART QSI 004
- 4) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.5
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES 0.010 TO 0.020

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. **29525**

**COPYRIGHT © 2005 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



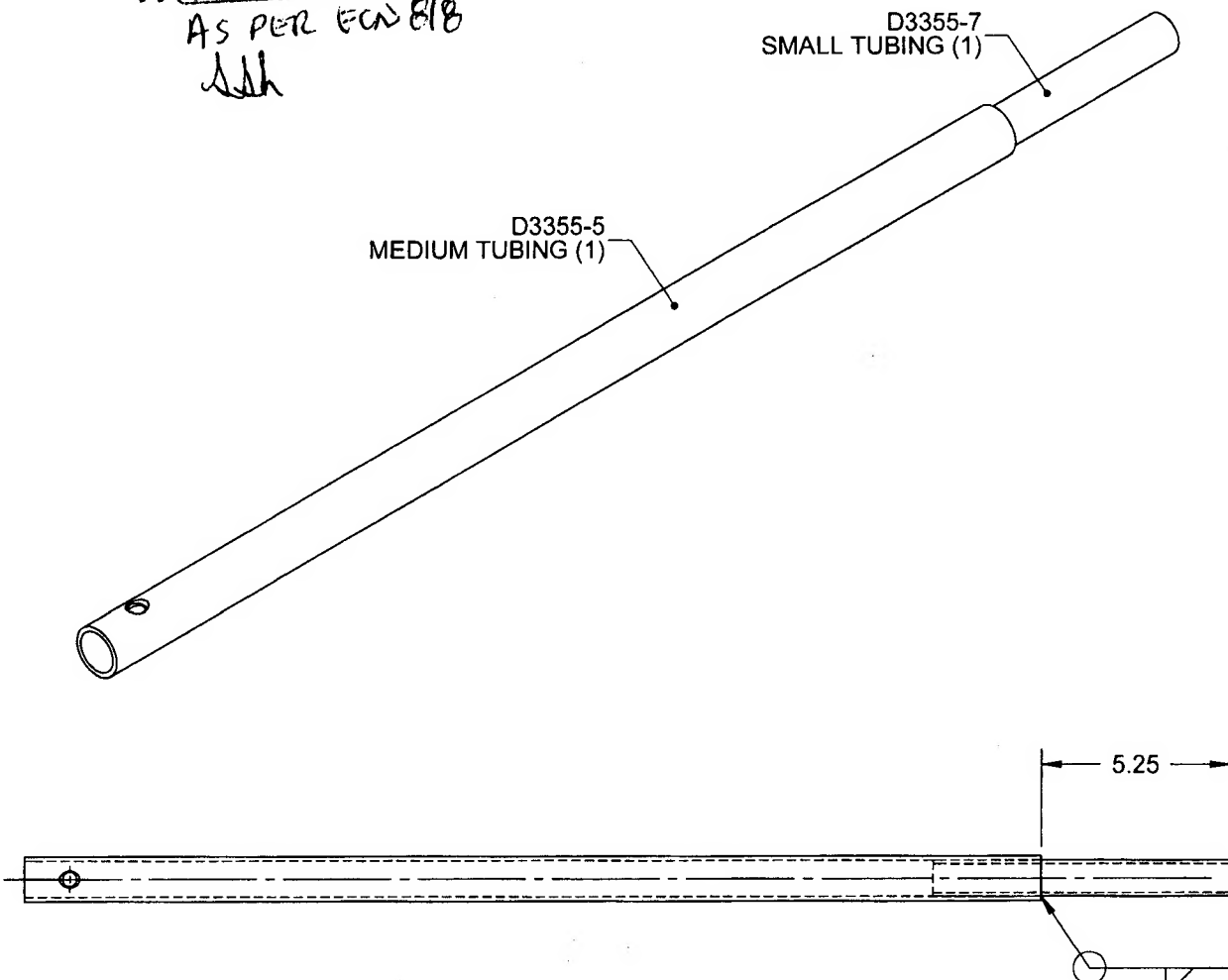


DESIGN RF	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3355	REV. B SHEET 3 OF 6
DATE 06.05.31	TITLE HANDLE WELDMENT		SCALE 1:5

RELEASED  
06.06.21

AS PER ECN 818

*[Signature]*



**D3355-047 ADJUSTABLE EXTENSION**

**NOTES:**

- 1) WELD PER DART QSI 004
- 2) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.5
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.010 TO 0.020

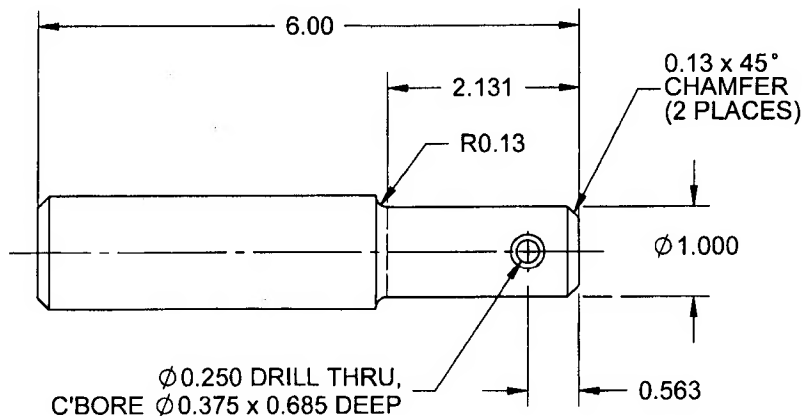
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 29525

**COPYRIGHT © 2005 BY DART AEROSPACE LTD.**

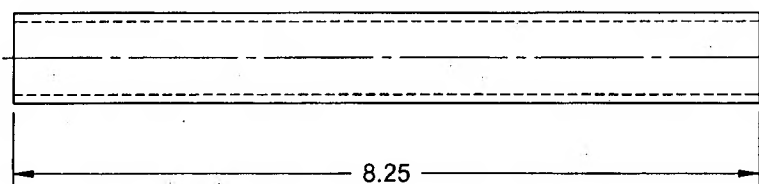
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

DESIGN RF	DRAWN BY CB	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3355</b>	REV. B SHEET 4 OF 6
DATE <b>06.05.31</b>	TITLE <b>HANDLE WELDMENT</b>		SCALE 1:2

**RELEASED**  
*06.06.21*  
*AS PER ECN 818***D3355-1 PIN****D3355-1 NOTES:**

- 1) MATERIAL: AISI-4130/ AISI-4140 OR ASTM A304-02/ A-434-BC/ A193-03 - GRADE-B7/ A29-03/ A322-91 OR UNS#-G41400 ROUND BAR. (REF. DART SPEC. M4140H-R)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

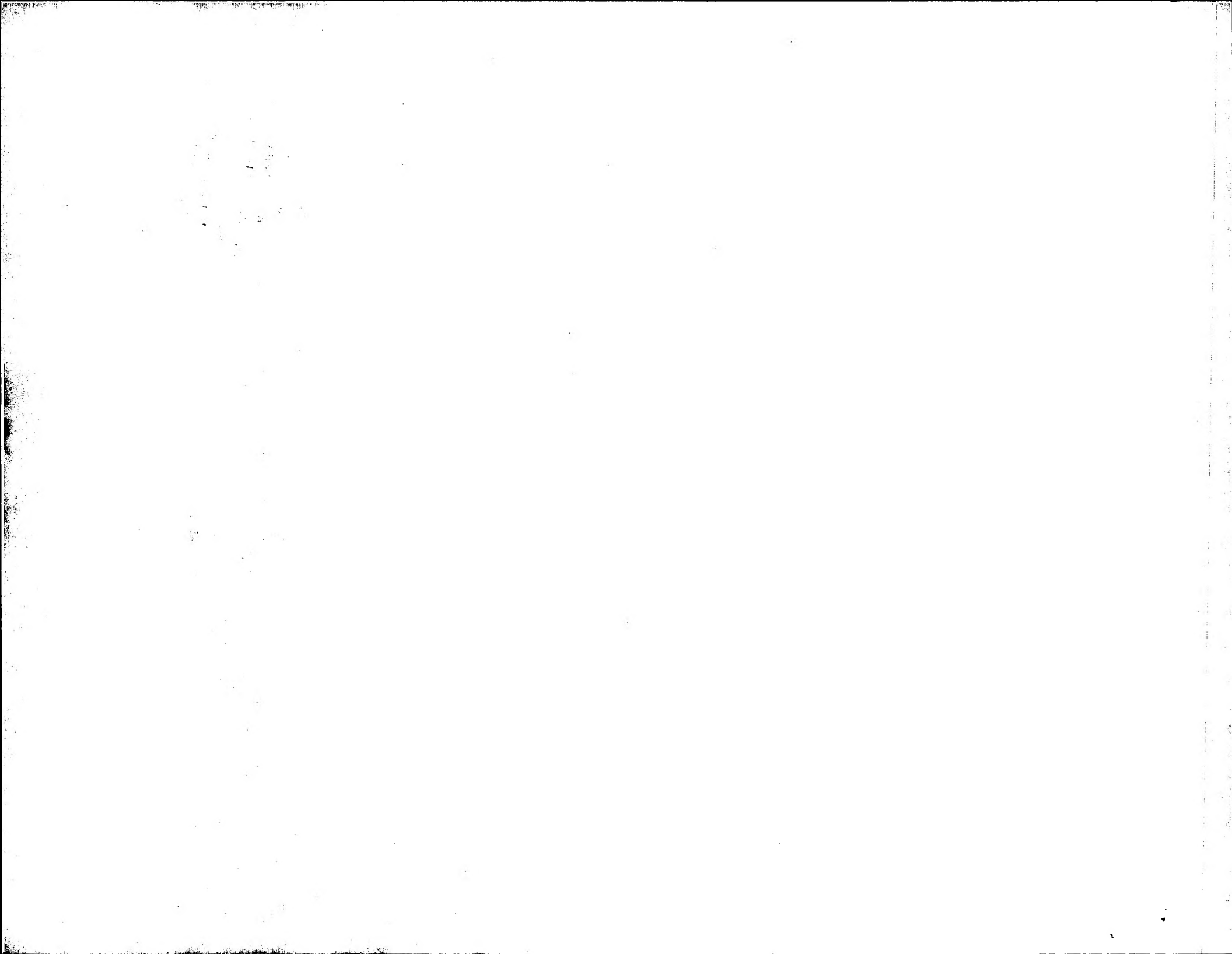
**D3355-7 SMALL TUBING****D3355-7 NOTES:**

- 1) MATERIAL: AISI 1018-1025 MILD STEEL SEAMLESS ROUND TUBING (REF. DART SPEC. M1020TR1.000W.095)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. **29525**

**COPYRIGHT © 2005 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



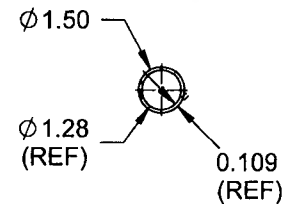
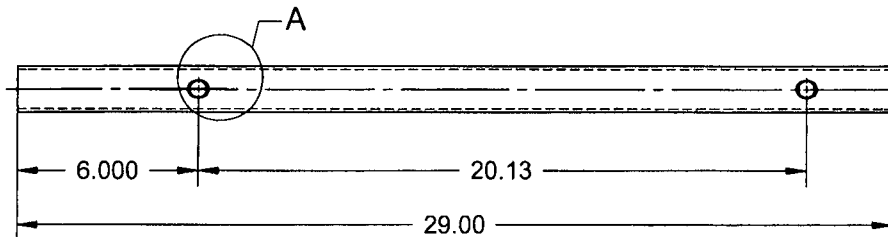
**DART**

DESIGN RF	DRAWN BY CB	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3355</b>	REV. B SHEET 5 OF 6
DATE <b>06.05.31</b>	TITLE <b>HANDLE WELDMENT</b>		SCALE 1:6

CHAMFER  $\phi 0.687$  (11/16)  
x 45°, 0.060 DEEP  
(2 PLACES)

$\phi 0.531$  (17/32) DRILL  
THRU (2 PLACES)

**DETAIL A**  
SCALE 1 : 2



### **D3355-3 LARGE TUBING**

#### **NOTES:**

- 1) MATERIAL: AISI 1018-1025 MILD STEEL SEAMLESS ROUND TUBING  
(REF. DART SPEC. M1020TR1.500W.109)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.015 TO 0.030

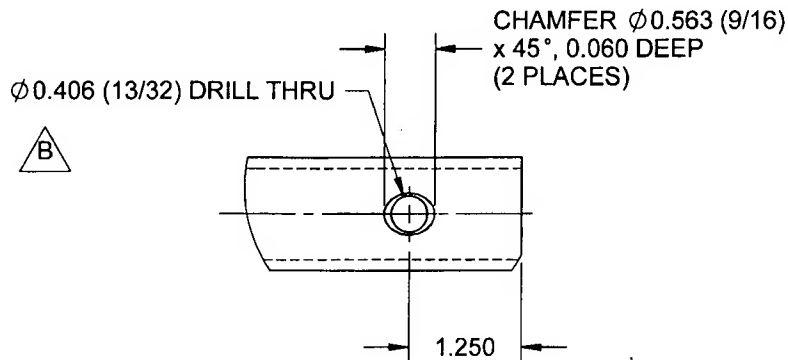
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. **29525**

**COPYRIGHT © 2005 BY DART AEROSPACE LTD.**

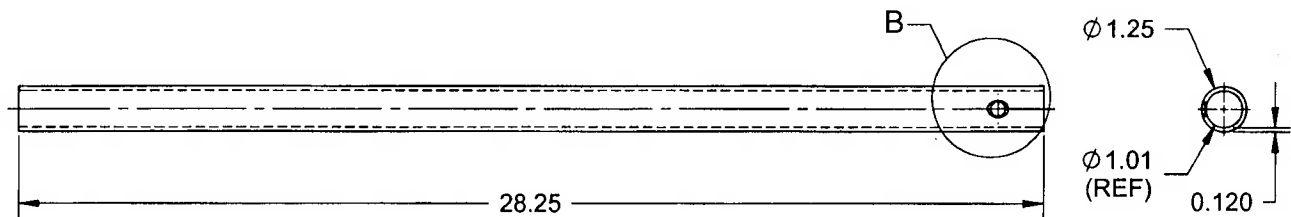
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

DESIGN RF	DRAWN BY CB	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED	DRAWING NO. <b>D3355</b>	REV. B SHEET 6 OF 6
DATE <b>06.05.31</b>	TITLE <b>HANDLE WELDMENT</b>		SCALE 1:5



**DETAIL B**  
**SCALE 1 : 2**



**D3355-5 MEDIUM TUBING**

**NOTES:**

- 1) MATERIAL: AISI 1018-1025 MILD STEEL SEAMLESS ROUND TUBING  
(REF. DART SPEC. M1018TR1.250W.120)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.015 TO 0.030

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. **29525**

**COPYRIGHT © 2005 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.